

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Amendments to Appendices I and II of CITES

Twelfth Meeting of the Conference of the Parties
Santiago (Chile), November 3-15, 2002

A. PROPOSAL

Inclusion of *Siebenrockiella crassicolis* in Appendix II in accordance with Article II 2(a) of the Convention, and satisfying Resolution Conf. 9.24, Annex 2a, Criteria A and Bi).

B. PROPONENT

People's Republic of China and United States of America.

3. SUPPORTING STATEMENT

1.1 Taxonomy

1.1.1 Class: Reptilia

1.2 Order: Testudines

1.3 Family: Bataguridae

1.4 Species: *Siebenrockiella crassicolis* (Gray, 1831)

1.5 Scientific synonyms: *Emys crassicolis*
Siebenrockiella is a replacement name for *Bellia* Gray (1869), which is preoccupied by *Bellia* Milne-Edwards (1848; Crustacea).

1.6 Common names:

English: Black Marsh Turtle

Spanish: ?

French: ?

1.7 Code Numbers:

2. Biological Parameters

Siebenrockiella crassicolis is a medium-sized turtle. In Malaysia, it may lay three or four clutches of one or two eggs each during a nesting season (Dr. Edward Moll, cited in Ernst and Barbour, 1989).

2.1 Distribution:

Siebenrockiella crassicolis is found in Indonesia, Cambodia, Malaysia, Myanmar, Singapore, Thailand, and Vietnam. Indonesia: In Indonesia, this species is found in the western Indonesian Islands of Sumatra (Karang Gading Wildlife Reserve, Lebak Ogan-Komering, and Kerumutan Baru Nature Reserve), Java (Rawa Danau Nature Reserve), and Borneo (Lake Sentarum Wildlife Reserve) (Samedi and Iskandar, 2000). Cambodia: In Cambodia, this species is found in the lowlands (Tana et al., 2000). Malaysia: In Malaysia,

this species inhabits mainly freshwater and *Melaleuca* swamps, rice fields, and irrigation canals and is widespread in the Peninsula (Sharma and Tisen, 2000). Myanmar: There is no specific information on the distribution of the black marsh turtle in Myanmar. Singapore: There is no specific information on the distribution of the black marsh turtle in Singapore. Thailand: In Thailand, *S. crassicolis* is found in the lowlands of central and peninsular regions, possibly throughout the country (van djik and Palasuwan, 2000). Vietnam: *S. crassicolis* is found in the wetlands, marshes, ponds, canals, and other slow-moving bodies of water in the lowlands of southern Vietnam (Hendrie, 2000).

2.2 Habitat availability:

Indonesia: Within the Wildlife Reserves where *S. crassicolis* is found, habitat includes estuarine mangrove; estuarine and sandy hummocks; forested beach; intermittent freshwater swamps; forest; swamp forest; peat forest; rivers; lakes; mangroves; lowland tropical rain forest; grassland in intermittent freshwater swamp; and lowland rainforest associated with terrestrial wetland (Samedi and Iskandar, 2000). Cambodia: No specific information on habitat availability for *S. crassicolis* was available for Cambodia. Malaysia: Both natural and man-made habitats for *S. crassicolis* are still abundant (Sharma and Tisen, 2000). Myanmar: No specific information on habitat availability for *S. crassicolis* was available for Myanmar. Singapore: No specific information on habitat availability for *S. crassicolis* was available for Singapore. Thailand: Currently in Thailand, suitable habitat appears widespread (van Dijk and Palasuwan, 2000). Vietnam: In Vietnam, there is a reduction of habitat for the black marsh turtle due to the agricultural conversion of wetlands and marshes to rice fields (Hendrie, 2000).

2.3 Population status:

Indonesia: *S. crassicolis* is uncommon in Indonesia (Samedi and Iskanar, 2000). Cambodia: The population of this species is potentially large in Cambodia and may be the most important population in the region (Tana et al., 2000). Malaysia: No assessments have been made on populations of *S. crassicolis* although it seems to be commonly caught by trappers in Kelantan, Terengganu, and Perak (Sharma and Tisen, 2000). Myanmar: No information was available on the population status of *S. crassicolis* in Myanmar. Singapore: No information was available on the population status of *S. crassicolis* in Singapore, although it is likely a very small population. Thailand: The black marsh turtle is not uncommon in Thailand (van Dijk and Palasuwan, 2000). Vietnam: Unknown.

2.4 Population trends:

Indonesia: There is not much scientific information on population trends of *S. crassicolis* (Samedi and Iskanar, 2000). Cambodia: No information was available on population trends for *S. crassicolis* in Cambodia. Malaysia: No data were available on population trends for the black marsh turtle in Malaysia. Myanmar: Historical information suggests that turtles were at one time widespread and relatively common but all currently available evidence indicates that populations are now severely depleted and some species may be on the verge of extirpation (Platt et al., 2000). Singapore: No information was available on population trends for *S. crassicolis* in Singapore. Thailand: In Thailand, *S. crassicolis* is apparently stable or in modest decline (van Dijk and Palasuwan, 2000). Vietnam: Population trends of *S. crassicolis* are unknown, however, as with other species in Vietnam, natural populations are unlikely to sustain present levels of collection (Hendrie, 2000).

2.5 Geographic trends:

No information was available on the geographic trends of *S. crassicolis* from any of the range countries.

2.6 Role of the species in its ecosystem:

S. crassicolis is predominantly carnivorous, feeding on worms, slugs, snails, shrimp, dead and decaying animals (Ernst and Barbour, 1989), and rotten plants which have fallen in the water (Wirot, 1979 as cited in Ernst and Barbour, 1989). It captures or feeds predominantly underwater (Ernst and Barbour, 1989) but comes onto land at night to forage for food and mate (Wirot, 1979 as cited in Ernst and Barbour, 1989).

2.7 Threats:

Indonesia: Hunting for trade is the most significant threat to freshwater turtles and tortoises in Indonesia followed by habitat destruction (Samedi and Iskandar, 2000). Cambodia: *S. crassicolis* is threatened in Cambodia mainly due to direct exploitation (Rhodin, 2002). Malaysia: Habitat loss and capture for the international meat trade are the primary threat to this species (Sharma and Tisen, 2000). Myanmar: It is likely that all species of turtles occurring in Myanmar are exploited for either food or local and export markets (Platt et al., 2000). Singapore: No specific information on threats to *S. crassicolis* in Singapore was available. Thailand: Threats to this species include habitat degradation, drowning in abandoned nets, accidental catch by fishermen, and some collection (van Dijk and Palasuwan, 2000). Vietnam: Threats to the black marsh turtle in Vietnam are from trade and habitat loss (Hendrie, 2000).

3. Utilization and Trade

3.1 National utilization:

Indonesia: There is little documented information on the domestic use of freshwater turtles and tortoises in Indonesia although it is believed that domestic use is much lower than the number of animals exported (Samedi and Iskandar, 2000). Cambodia: Local subsistence use of turtles is widespread in Cambodia, and probably not species-specific (Tana et al., 2000). Turtles that are harvested in Cambodia but not sold because of lack of demand from traders, are probably consumed by the hunters (Tana et al., 2000). There is also domestic trade in turtles, which are used for meat, eggs, Khmer and Chinese medicine, decoration, pets, and Buddhist release (Tana et al., 2000). Malaysia: *S. crassicolis* is utilized nationally in the pet trade (Sharma and Tisen, 2000) and high numbers of this species are in the food trade (van Dijk et al., 2000). Myanmar: Incidental observations of turtle traders (Platt et al., 2000, 2001 as cited in van Dijk, 2002) within Myanmar indicate that turtle collection is widespread and intensive throughout the country (van Dijk, 2002). Singapore: No specific information on national utilization of the black marsh turtle in Singapore was available. Thailand: In Thailand, some of these animals are traded for release at temple ponds; others are consumed, although this is the least desirable of the turtle species for this purpose because of its smell (van Dijk and Palasuwan, 2000). Vietnam: Most individuals encountered today are probably sold to traders although in the past it is likely that these turtles were consumed locally (Hendrie, 2000).

3.2 Legal international trade:

Indonesia: Records from the Directorate General of Fisheries of Indonesia show that exports of freshwater turtles and tortoises in 1997 were 423,100 animals weighing 670,653 kg and in 1998, they were 396,719 animals weighing 828,032 kg (Samedi and Iskandar, 2000). *S. crassicolis* was likely one of the species exported in the greatest volume (Samedi and Iskandar, 2000). They are exported in large numbers from Sumatra, Indonesia (Shepherd, 2000). On one day in September 1999, around 400 individuals of this species were seen at a single exporting company in Medan, Sumatra (Shepherd, 2000). Cambodia: Legal international trade, run through a government export agency KAMFIMEX, ships turtles by air directly from Phnom Penh to Guangzhou or Hong Kong Special Administrative Region of China (Hong Kong SAR), China (Tana et al., 2000). This trade is restricted by an annual quota and by the size of individual turtles, which must be larger than 1 kg to be legally imported (Tana et al., 2000). In the first legal international export of live reptiles in the fishing season 1998-1999, the total exported quantity was 200 tons: turtles were estimated to comprise 50% of this shipment (Tana et al., 2000). The same live reptile quantity was approved for export to China in the fishing season 1999-2000 (Tana et al., 2000). Malaysia: There is only limited information available from the Department of Wildlife and National Parks on the legal trade in freshwater turtles (Sharma and Tisen, 2000). Records indicate that 15,818 live turtles were imported into Hong Kong SAR from Malaysia between 1993 and 1996 (Lee, 1996 cited in Sharma and Tisen, 2000). The Department of Wildlife and National Parks reports indicate that between January and October 1999, 135,121 wild caught specimens of *S. crassicolis* were exported from Peninsular Malaysia (Sharma and Tisen, 2000). Myanmar: Commercial trade in tortoises and freshwater turtles is not allowed in Myanmar, and as a result, no official trade statistics are available (van Dijk, 2002). Singapore: No information was available on legal international trade of *S. crassicolis* in Singapore. Thailand: There is no legal international trade in this species from Thailand, because the species is specifically protected from exploitation under the WARPA law (Wild Animals Reservation and Protection Act B. E. 2535) (van Dijk and Palasuwan, 2000). Vietnam: Official CITES office records indicate that 1,515 black marsh turtles were legally exported in the period 1998-1999 (Hendrie, 2000).

3.3 Illegal trade:

China: Many CITES-listed species observed in south China food markets have likely been imported into China illegally, particularly Appendix-I species such as *Batagur baska* (Lau and Shi, 2000). Many non-CITES species in Chinese food markets have likely also been imported illegally, attesting to the documented illegal exports from other countries such as Myanmar and Vietnam. *S. crassicolis* has been recorded in markets in Hainan, Guanzhou, and Shenzhen (deBruin and Artner, 1999; Lau and Shi, 2000). Chinese Taipei: *S. crassicolis* was abundant in markets surveyed in Chinese Taipei (Chen et al., 2000). Indonesia: Actual export numbers of all species are essentially several times greater than those managed by the Indonesian government (Samedi and Iskandar, 2000). Cambodia: The illegal international trade of Cambodian turtles to Vietnam is much larger than the legal trade quantities to China (Tana et al., 2000). Although there is virtually no direct information on exploitation and trade in emydids in Cambodia, a notable proportion of specimens in trade in Vietnam, most destined for export to China, originate in Cambodia (LeDien Duc and Broad, 1995 cited in Jenkins, 1995). Few data exist on illegal trade of turtles to Thailand, although without additional information it is presumed to be much less significant than the trade to Vietnam

(Tans et al., 2000). Malaysia: In Malaysia, it is probable that illegal trade occurs since it is unlikely that local management authorities, including Wildlife Department and Customs staff are able to identify all traded turtle species (Sharma and Tisen, 2000). Myanmar: Substantial quantities of turtle species endemic to Myanmar observed in markets in mainland China (Kuchling, 1995; Artner & Hofer, 2001 as cited in van Dijk, 2002) show that illegal exports from Myanmar are substantial (van Dijk, 2002). Singapore: No information was available for illegal trade of *S. crassicolis* in Singapore. Thailand: *S. crassicolis* is traded illegally for export from Thailand (van Dijk and Palasuwan, 2000). Vietnam: Unknown. Only one observation of this species has been made during inspections of trade seizures along northern ground routes (Hendrie, 2000). In Vietnam, trade in turtles includes virtually all species (Hendrie, 2000) however, *S. crassicolis* was not observed in market surveys by Le Sien Duc and Broad (1995) and Lehr (1996). This species may be presently absent from trade because it is no longer readily found in the wild or because it may be shipped by alternative routes such as sea, air, or rail from southern Vietnam (Hendrie, 2000).

3.4 Actual or potential trade impacts:

Indonesia: The demand for turtles and tortoises for pets, food, and medicine is increasing with growing human populations and economic improvements especially in East and Southeast Asia. Without further control on the trade of these species, they will certainly decline (Samedi and Iskandar, 2000). Cambodia: *S. crassicolis* is considered “Endangered” in Cambodia due to direct exploitation (Rhodin, 2002). Malaysia: Capture for the international meat trade is potentially a major threat to this species (Sharma and Tisen, 2000). Myanmar: Available evidence suggests declines have occurred as a result of over-harvesting for both local consumption and to meet the demands of export markets and with one exception all chelonian species in Myanmar should be considered threatened by levels of harvest that are almost certainly unsustainable (Platte et al., 2000). Singapore: No information was available on actual or potential trade impacts to the black marsh turtle in Singapore. Thailand: Potential trade impacts to these species in Thailand are probably modest or insignificant compared to other threats such as habitat degradation and fishing impacts (van Dijk and Palasuwan, 2000). Vietnam: Potential trade impacts to this species are the depletion of wild populations and compromised viability of surviving populations (Hendrie, 2000).

3.5 Captive breeding or artificial propagation for commercial purposes (outside country of origin):

Vietnam: The Institute for Ecology and Biological Resources is involved in establishing softshell breeding farms but the success is unknown (Hendrie, 2000). There is currently a trend in Vietnam to establish “breeding farms” for animals confiscated from trade (Hendrie, 2000).

4. Conservation and Management

4.1 Legal status:

3.1.1 National:

Cambodia: Law No. 33 (Department of Fisheries) and Law No. 35 (Department of Forestry) are the main laws on the use of aquatic animals and use of land animals,

respectively (van Dijk, 2002). Joint Declaration No. 1563 (Ministry of Agriculture, Forestry and Fisheries and Ministry of Environment) states that wild animals can't be hunted with traps, explosive materials, or poison, nor can wild animals or their products be sold, commercialized, exploited, or transported, nor can wild animals or their products be served in restaurants (Tana et al., 2000). Declaration No. 359 1563 (Ministry of Agriculture, Forestry and Fisheries) protects "nationally threatened" wild animal species (van Dijk, 2002). Although no turtles are currently listed, they could be added in the future if they are shown to be threatened (van Dijk, 2002). Government Decision 01 (Department of Forestry) and Government Decision 02 (Department of Fisheries) focuses on ending illegal trade in land animals and in aquatic animals respectively (Tana et al., 2000). Cambodia has been a signatory member of CITES since 1997.

Indonesia: *S. crassicollis* is neither listed in the national protection status nor in CITES appendices and is managed as a fishery resource in Indonesia in accordance with Act no. 12 of 1985 (van Dijk, 2002). Management of fishery resources are delegated to the Fishery Service which is under the local (district) government where expertise in conservation is very limited and can lead to over-exploitation (Samedi and Iskandar, 2000). The species is managed by the Fisheries Department through the establishment of capture and export permits which may be issued in some cases without consideration of quotas set by the Directorate General of Nature Protection and Conservation (van Dijk, 2002). Indonesia acceded to CITES in December 1978, which came into force in March 1979 (van Dijk, 2002).

Malaysia:

Federal Legislation

At the national level, two federal Acts are the primary legislation for the protection of wildlife and fisheries i.e. the Protection of Wild Life Act 1972 and Fisheries Act 1985. The former, applicable only to Peninsular Malaysia, does not cover any of the species of chelonians, and this means that they are extremely vulnerable to exploitation (Sharma & Tisen, 2000 as cited in van Dijk, 2002). In contrast, the Fisheries Act 1985 specifically states in its preamble, "An Act relating to fisheries, including the conservation, management and development of maritime and estuarine fishing and fisheries, in Malaysian fisheries waters, to include turtles and riverine fishing in Malaysia and matters connected therewith or incidental thereto." However, the Act also clarifies that matters relating to maritime and estuarine fisheries, excluding turtles, are enumerated in the Federal and Concurrent Lists, whereas turtle hunting and riverine fishing are under the State List. This means that provisions of the Act "insofar as they relate to turtles and riverine fisheries in any State in Malaysia shall not come into operation in that State until they have been adopted by law made by the Legislature of the State." Whether or not individual States have adopted the Fisheries Act 1985, their fisheries resources are automatically afforded legal protection by virtue of these matters being on the Concurrent List of the Constitution, but turtles are specifically excluded from this legal mandate (van Dijk, 2002). Thus, the onus lies on each State to formulate effective legislation to protect both marine and non-marine turtles. Unfortunately, this circumstance has led to either a lack of standardised legal protection for most turtle species inhabiting the peninsular or lack of protection whatsoever. (Sharma & Tisen, 2000)

Part VII of the Fisheries Act 1985 deals with turtles and inland fisheries and promotes development and rational management by state authorities in consultation with the Director General of the Department of Fisheries. This allows the states to make rules for proper conservation and regulation of turtles, their eggs, and inland fisheries, inclusive of licensing, fishing methods, dam construction, and sand removal. In areas beyond the jurisdiction of the States, the Director General has the power to make regulations. It is unclear as to whether the terminology used in the legislation intended to include only marine turtles, or provides means to protect freshwater terrapins as well (Sharma & Tisen, 2000 as cited in van Dijk, 2002).

The import and export of turtle eggs are subject to the restrictions stated in the Customs (Prohibition of Imports) Order 1988 and Customs (Prohibition of Export) Order 1988; however, there is confusion over the exact meaning of the terms used in the legislation. Under the First Schedules, the importation and exportation of “the turtles eggs” from or to any country are absolutely prohibited. Under the Second Schedules, “eggs of testudinate (terrapin and the like) excluding turtle eggs” may not be imported or export from or to any country without license. Unfortunately, the terminology is not well defined in the legislation, which may result in various interpretations. It is widely assumed that “turtle eggs” means those of marine turtles only, while the “eggs of testudinales (terrapin and the like)” refer to all other species, since all turtles, terrapins and tortoises are considered testudinales (Sharma & Tisen, 2000).

State Legislation

Existing legislation at the State level in Peninsular Malaysia concentrates on matters related to regulated exploitation, licensing for egg collection, and possession or killing of marine turtles, but not terrapins or tortoises (Gregory & Sharma, 1997 as cited in van Dijk, 2002). Of the eleven peninsular States, only six, excluding Perak’s River Rights Enactment 1915, currently have legislation pertaining to protection and exploitation of turtles and three States (Pahang, Penang and Perak) had a draft document under review in 1999. However, two States (Perlis and Selangor) do not have any legislation whatsoever to safeguard chelonians (Sharma & Tisen, 2000).

In 1915, Perak implemented the River Rights Enactment, which granted exclusive rights to take turtle eggs along specified areas of the Perak River to be vested in the Ruler of the State. During five months of the year, setting traps was prohibited and at no time could anyone kill any turtle without permission. Still in effect today, this enactment claims turtles as those reptiles of genera *Orlitia*, *Callagur*, *Batagur*, or *Hardella*. New legislation is currently being drafted in Perak to provide more effective protection for turtles (Sharma & Tisen, 2000).

Legal measures for turtle conservation were initiated in Terengganu and Kedah in 1951 and 1972, respectively, where legislation pertaining to reptiles was based on local names instead of using taxonomic criteria. These two States rely on Malay language terms such as “tuntung” and “penyu”, which are generic names for terrapins and marine turtles, for identification of species. Disjointed phrasing in the Kedah Enactment seems to imply that only reptiles known as “penyu” and “tuntung” known as *Callagur picta* (= *C. borneoensis*) are covered by the legislation. (Sharma & Tisen, 2000)

Legislation from Johor, Kelantan and Negeri Sembilan uses the phrase “any reptile belonging to Order Chelonia” in its interpretation. However, Malacca’s legislation restricts its coverage to five species listed in the First Schedule, although it qualifies turtles as being any reptile belonging to the Order Chelonia, which technically means all twenty-two local species (Sharma & Tisen, 2000).

Upon their entry into the Federation in 1963, the States of Sabah and Sarawak were granted special powers, not provided for Peninsular States, to enact legislation autonomously. Therefore, two main pieces of legislation form the basis of protection for some of East Malaysia’s marine and non-marine species i.e. the Fauna Conservation Ordinance 1963 and Wild Life Protection Ordinance 1998 (Sharma & Tisen, 2000).

In Sabah, the Parks Enactment 1984 provides blanket protection of all animals, including reptiles, from exploitation within the boundaries of Sabah’s parks. Under the Wild Life Enactment 1997, only *Manouria emys* and *Orlitia borneensis* are listed in the Protected Species List, but no other freshwater turtles are included (Sharma & Tisen, 2000).

In Sarawak, *Orlitia borneensis* and *Callagur borneoensis* are listed as ‘Totally Protected Species’ and all freshwater turtles and tortoises are listed as ‘Protected Species’ under the Wild Life Protection Ordinance 1998. Enforcement of this protection is the responsibility of the Wildlife, National Parks and Wildlife Office of the Sarawak Forestry Department (Sharma & Tisen, 2000).

Malaysia acceded to CITES in October 1977 and entered into force in January 1978.

Myanmar: The Burma Wildlife Protection Act, 1936, which was based on the Wild Birds and Animal Protection Act of 1912, is the main law extending protection to listed species (Van Dijk, 2002). In 1991, the only listed species were mammals and birds, and no turtle species were included in this law (Gaski and Hemley, 1991 cited in van Dijk, 2002). Myanmar law prohibits the commercial exploitation of natural resources, including tortoises and freshwater turtles, but allows collection for subsistence use outside protected areas and reserved forests (van Dijk, 2002). Thus, the commercial trade of tortoises and freshwater turtles is illegal (Platt et al., 2000). All native turtle species are specifically protected under the Protection of Wildlife, Wild Plants and Conservation Law, 1994, and all wildlife is protected in wildlife sanctuaries and national parks (Platt et al., 2000; Moe et al., 2002). The Department of Fisheries does not issue permits for the harvest of turtles and Law 34 provides stiff penalties for those engaged in turtle trading (Platt et al., 2000). Myanmar became a CITES Party in 1997.

Singapore: Taking, keeping, or killing a wild animal without a licence is prohibited from the Wild Animals and Birds Act, Chapter 351, of 1965 (van Dijk, 2002). Chapter 7 of this same Act, allows the Minister for National Development to control or prohibit movement of all types of animals and their parts into, within, and from Singapore (van Dijk, 2002). Import, export, and transshipment are prohibited unless licensed by the Director of Primary Production (Gasky and Hemley, 1991 cited in van Dijk, 2002). Singapore acceded to CITES in November 1986 and came into force in February 1987.

Thailand: In Thailand, the black marsh turtle is specifically protected from exploitation under the Wild Animals Reservation and Protection Act B. E. 2535 (WARPA), which was revised in 1992 (van Dijk and Palasuwan, 2000, van Dijk, 2002). The WARPA Law controls hunting, trade, possession, import, export, and commercial breeding of wildlife. It also includes provisions for the implementation of CITES. Thailand has been a CITES signatory since 1983.

Vietnam: Ministerial decree No 18 of the Council of Ministers Stipulating the Categories of rare and precious forest fauna and flora, and their management and protection, dated 17 January 1992, includes two species of non-marine turtles, *Indotestudo elongata* and *Pelochelys bibroni* (= *P. cantorii*), under category II. Thus utilisation of these two species is restricted to scientific research, establishing breeding populations, and international exchange. Any such activities require a collection permit from the Ministry of Agriculture and Rural Development (Hendrie, 2000). The list of species protected by Decree 18 is currently under review and more turtle species may be included. Directive 359 (1996) restricts trade in wildlife and animal parts, including prohibiting the sale of wildlife in restaurants. Commerce and trade regulations require a permit issued at the provincial level for trade in any commodity, including wildlife (Hendrie, 2000). Circular 62/2001/TT-BNN issued on 05 of June 2001 by the Ministry of Agriculture and Rural Development to guide imports and exports of goods and commodities managed by the Ministry for the period of 2001-2005 stipulates that Vietnam prohibits exports of all wild animals and rare and precious plants. Thus export of all native turtle species is prohibited. Vietnam became a Party to CITES in 1994.

4.1.2 International:

The black marsh turtle is not currently listed in the CITES appendices.

4.2 Species management:

4.2.1 Population monitoring:

No specific population monitoring programs for this species, or for Asian freshwater turtles in general, have been identified.

4.2.2 Habitat conservation:

Indonesia: Some of the wetland areas that are important habitat for freshwater turtles and tortoises have been included in the network of protected areas in the forms of National Parks, Wildlife Reserves, and Nature Reserves (Samedi and Iskandar, 2000). Thailand: There are over 100 protected areas in Thailand where collecting or other forms of disturbance of any plants or animals are prohibited (van Dijk and Palasuwan, 2000). There are also various Non-Hunting areas, but there is often intensive use of these areas by the local population (van Dijk and Palasuwan, 2000). Malaysia: A number of protected areas have been declared in Malaysia including extensive areas such as Belum, Taman Negara, and Endau-Rompin in the Peninsula, and Mulu and Kinabalu National Parks in Sarawak and Sabah (Sarma and Tisen, 2000). Vietnam: There are 11 National Parks and 91 Protected Areas designated in

Vietnam which cover 13,425 km² or 4.1% of the country (MacKinnon, 1997 as cited in Hendrie, 2000).

4.2.3 Management measures:

Vietnam: A Turtle Conservation and Ecology Project was established in 1998 by the Cuc Phong National Park and the Forest Protection Department that was aimed at receiving and translocating turtles confiscated from the wildlife trade, conducting research, public education, and training of regional authorities (Hendrie, 2000).

4.3 Control measures:

4.3.1 International trade:

Vietnam: Vietnam recently adopted CITES-implementing legislation, which should help control international trade.

4.3.2 Domestic measures:

Thailand: Enforcement efforts to stop exploitation and trade in protected species and to prevent incursions and encroachment in protected areas are sometimes restrained by lack of manpower and identification skills and the complications from different responsibilities and authorities of various departments (van Dijk and Palasuwan, 2000).

Vietnam: The National Forest Protection Department is increasing enforcement activities on the ground and investing in the training of its rangers however, the process is slow and unlikely to achieve the results that are needed to meet the threat posed by the illegal wildlife trade (Hendrie, 2000).

5. Information on Similar Species

No information was available.

6. Other Comments

The species' status on the IUCN 2000 Red List is: Vulnerable (A1cd+2cd).

All range countries were consulted by mail regarding this proposal. The Republic of Indonesia strongly supports this proposal.

7. Additional Remarks

Anders G. J. Rhodin of the Chelonian Research Foundation has recommended that *Siebenrockiella crassicollis* be considered for listing in Appendix II.

8. References

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